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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/166,625	10/05/1998	DAVID C. MAY	1020-0501	9351
23643	7590	06/18/2004		
BARNES & THORNBURG 11 SOUTH MERIDIAN INDIANAPOLIS, IN 46204				
EXAMINER JUSKA, CHERYL ANN				
ART UNIT		PAPER NUMBER		
1771				

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/166,625

Applicant(s)

MAY, DAVID C.

Examiner

Cheryl Juska

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 12-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

1. In view of the Appeal Brief filed on April 2, 2004, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 7, 8, 10, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,266,390 issued to Garland in view of U.S. Patent 5,368,912 issued to Reaves and U.S. 5,761,853 issued to Trosper et al.

Claim 1 is drawn to a drop cloth comprising a first layer of nonwoven fabric which

Art Unit: 1771

includes natural fibers having a thickness of 1-2 mils, and a second layer of a liquid impervious plastic material. Claim 3 limits the natural fibers to cotton fibers. Independent claim 10 is analogous to claim 1 with the exception that the nonwoven includes rayon fibers. Claims 7 and 15 limit the first layer to be fused to the second layer. Claims 8 and 16 limit the plastic material to polyethylene.

Garland discloses a drop cloth comprising (a) a first layer of a spunbonded polypropylene nonwoven (b) a second of a liquid impervious plastic film layer of polyethylene or polypropylene, (c) a third layer of a spunbonded polypropylene nonwoven, wherein the nonwoven layers are absorbent (claim 1, col. 5, line 50-col. 6, line 17). The layers are bonded together by heat through a nip roller (col. 4, lines 36-63).

Hence, it can be seen that the Garland patent teaches the limitations of said claims with the exception of (a) the claimed thickness and (b) that the nonwoven layer contains natural or rayon fibers. With respect to the former exception, Garland teaches the thickness of the three layers is 0.0015 to 0.004 mils, with a thickness of the nonwoven layers each in the range of 0.005 to 0.002 mils (claims 2 and 4). As mentioned in the last Office Action, the examiner believes this disclosure to be in error. Specifically, even if the entire thickness of the three layer laminate is due to the fiber diameter of a single polypropylene fiber—which it is clearly not—it would not be possible to produce a fiber small enough to make spunbond polypropylene nonwoven having said thickness. In other words, a spunbond nonwoven thickness of 0.0015-0.004 mils would require a polypropylene fiber having a denier of about 9×10^{-6} – 7×10^{-5} . The examiner knows of no technology that could produce a viable fiber of this size. Additionally, Garland teaches the spunbond polypropylene nonwoven has a basis weight of 1-2 oz/yd² (col. 3, line 66-col. 4, line

Art Unit: 1771

3). For polypropylene fibers having an average density of 0.9 g/cm^3 , this would produce a nonwoven of about $38 - 76 \text{ }\mu\text{m}$ or $1.5 - 3$ mils thick. Furthermore, other known spunbond polypropylene nonwovens having similar basis weights have a thickness greater than that disclosed by Garland. [US 5,035,941, col. 9, lines 3-8, teaches a 1.25 oz/yd^2 spunbond polypropylene nonwoven has a thickness of 13 mils, US 4,704,323, col. 7, lines 10-15, teaches a 1.6 oz/yd^2 one has a thickness of 8 mils, and US 4,441,228, col. 4, lines 42-49, teaches one having a basis weight of 2.0 oz/yd^2 and a thickness of 16 mils.] Thus, the examiner believes one skilled in the art would recognize that the thickness disclosed by Garland to is incorrect. As such, it would have been obvious to one skilled in the art to employ a thickness within the range claimed by applicant in order to produce a strong and durable, yet flexible drop cloth.

With respect to the latter exception, Garland teaches polypropylene for the nonwoven rather than the claimed natural cotton or rayon fibers. However, Garland also teaches the importance of said nonwoven being absorbent of liquids including moisture, paint thinners, wood stains and solvents..." (col. 3, lines 60-66). Garland also explicitly teaches that the outer layers (i.e., spunbond polypropylene) have to be specially formed or treated to absorb moisture-based products (col. 3, lines 29-31). Thus, it would have been obvious to one of ordinary skill in the art to substitute fibers that do not need said special treatment to be absorbent, such as inherently absorbent cellulosic fibers (i.e., cotton and rayon). The use of said inherently absorbent fibers is well known in the art of drop cloths. For example, Garland itself teaches conventional drop cloths made of cotton canvas (col. 1, lines 8-42). Additionally, Reaves teaches a drop cloth made of natural or synthetic materials, such as woven cotton sheeting or a polypropylene nonwoven (col. 2, lines 55-65). Additionally, Trosper teaches a drop cloth comprising a cotton

Art Unit: 1771

or similar fabric and a liquid impermeable back coating is commercially known. Hence, it would have been obvious to one skilled in the art to substitute fibers that are known to be inherently absorbent fibers suitable for use in the drop cloths, as taught by Garland, Reaves, and Trosper, for the specially treated absorbent polypropylene fibers of the Garland nonwoven. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Therefore, claims 1, 3, 7, 8, 10, 15, and 16 are rejected as being obvious over the cited prior art.

4. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Garland, Reaves, and Trosper patents, as applied to claims 1 and 10 above.

Claims 6 and 14 limit the nonwoven fabric to also have synthetic fibers which are fused together. As previously discussed, it would have been obvious to one of ordinary skill in the art to substitute natural or rayon fibers for the polypropylene fibers of the Garland invention. Additionally, it would have been obvious to one of ordinary skill in the art of nonwovens to employ a blend of absorbent fibers and fusible fibers in order to produce a nonwoven web which enhances the bonding of the nonwoven to the plastic film layer of Garland. Applicant is hereby given Official Notice that it is well known in the art to employ a blend of synthetic thermoplastic fibers and cellulosic fibers to produce a strong nonwoven fabric being bonded by said thermoplastic fibers and to enhance the nonwoven's ability to bond to other thermoplastic materials. Hence, said claims are rejected.

5. Claims 4, 5, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Garland, Reaves, and Trosper patents, as applied to claims 1 and 10 above.

Claims 4 and 12 limit the fibers of the nonwoven to be oriented in a predetermined

Art Unit: 1771

pattern, while claims 5 and 13 limit the fibers of the nonwoven to be oriented randomly. Both fiber orientations are well known in the art of nonwovens. The choice of fiber orientation is dependent upon the structure of the nonwoven itself (i.e., carded, needlepunched, spunbond, etc.) and is a matter of choice based upon strength requirements of the nonwoven, manufacture costs, and fiber type, fiber length. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Hence, claims 4, 5, 12, and 13 are rejected as being obvious variants of the Garland invention.

6. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Garland, Reaves, Trosper patents, as applied to claims 1 and 10 above, and in further view of US 5,443,885 issued to Wilson and US 5,227,409 issued to Mobley et al.

Claims 9 and 17 limit the second layer to having an adhesive material disposed thereon for facilitating a temporary attachment of the drop cloth to a surface.

Garland, Reaves, and Trosper do not teach the use of an outer adhesive layer for temporary adhesive of the drop cloth to a surface. However, it is well known in the art of protective covers to include an outermost adhesive layer in order to facilitate positioning and securing of said cover. For example, Wilson teaches a self-adhesive plastic drop cloth to protect a carpet or flooring from paint, caulk, dirt and debris (col. 1, lines 14-38). Similarly, Mobley teaches a polyurethane adhesive which can be applied to a plastic or fabric drop cloth for adhering said drop cloth in place during use (col. 7, lines 51-60). Thus, it would have been obvious to one skilled in the art to employ an outermost adhesive layer to the drop cloth of the prior art of

Art Unit: 1771

Garland, Reaves, and Trosper in order to facilitate temporary attachment of said drop cloth to a surface being protected. Therefore, claims 9 and 17 are rejected.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached at 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CHERYL A. JUSKA
PRIMARY EXAMINER